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EXAMINER	
LEO, LEONARD R	

ART UNIT	PAPER NUMBER
3743	19

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/977,426	Applicant(s) SAITO ET AL.	
	Examiner Leonard R. Leo	Art Unit 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2003 and 10 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

The amendment filed January 10, 2003 has been entered. Claim 2 is cancelled, and claims 1 and 3-9 are pending.

Drawings

Figures 9-10 should be designated by a legend such as -- Prior Art -- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The designation of -- Related Art -- is insufficient. Figures 9-10 are clearly disclosed as conventional and qualify as "Prior Art" and should be labeled as such.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "said refrigerant ***circulating*** spaces" in line 9 and "said ***respective*** refrigerant path" in line 14. There is insufficient antecedent basis for these limitations in the claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 as understood is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 or 4 of U.S. Patent No. 6,491,092.

The patent claims all the claimed limitations of the application except open and closed ends in the refrigerant circulation spaces.

Inherently, the refrigerant circulation spaces have open ends to provide an inlet or an outlet with the refrigerant and closed ends to provide flow direction to or from the refrigerant path.

Claims 3-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 or 4 of U.S. Patent No. 6,491,092 in view of Torigoe et al (US) or Nishishita.

The patent claims all the claimed limitations of the application except separate first and second refrigerant paths.

Torigoe et al (US) discloses a heat exchanger comprising a plurality of distribution parts each having a first and second plate 4, 4 defining first and second refrigerant paths 20, 30, and openings 231, 221 forming first continuous inlet and outlet spaces 23, 22 and openings 331, 321 forming second continuous inlet and outlet spaces 33, 32; a plurality of alternately stacked fins 5;

and conduit 45; wherein the first and second refrigerant paths 20, 30 are separate for the purpose of providing discrete flow units with respect to the air flow to improve heat exchange.

Nishishita discloses a heat exchanger comprising a plurality of distribution parts 9 each having a first and second plate defining first and second refrigerant paths 6, 7, and openings in tanks 2, 4 forming first continuous inlet and outlet spaces 11, 12 and openings in tanks 5, 3 forming second continuous inlet and outlet spaces 13, 14; a plurality of alternately stacked fins 10; and conduit 19; wherein the first and second refrigerant paths are separate 6, 7 for the purpose of providing discrete flow units with respect to the air flow to improve heat exchange.

Since the patent and Torigoe et al (US) or Nishishita are both from the same field of endeavor and/or analogous art, the purpose disclosed by Torigoe et al (US) or Nishishita would have been recognized in the pertinent art of the patent.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the patent separate first and second refrigerant paths for the purpose of providing discrete flow units with respect to the air flow to improve heat exchange as recognized by Torigoe et al (US) or Nishishita.

Regarding claims 5 and 8-9, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a fluid distributor in the inlet space of the second refrigerant path, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *In re Harza*, 274F.2d 669, 124 USPQ 378 (CCPA 1960).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 as understood is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sonoda et al or Aikawa et al (5,651,268)(Figure 11).

Claim 3 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Torigoe et al (US)(Figure 9).

Claim 3 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Nishishita.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torigoe et al (US) or Nishishita in view of Osthues et al.

Torigoe et al (US) or Nishishita discloses all the claimed limitations except a first continuous inlet space having a decreasing cross-sectional flow area from the open to the closed end.

Osthues et al discloses a heat exchanger comprising a plurality of refrigerant distribution parts defining a first refrigerant path 16 connected to first continuous inlet 14 and outlet 22 spaces; wherein the first continuous inlet space having a decreasing cross-sectional flow area from the open to the closed end for the purpose of providing uniform fluid distribution to improve heat exchange.

Since Torigoe et al (US) or Nishishita and Osthues et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Osthues et al would have been recognized in the pertinent art of Torigoe et al (US) or Nishishita.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Torigoe et al (US) or Nishishita the first continuous inlet space having a decreasing cross-sectional flow area from the open to the closed end for the purpose of providing uniform fluid distribution to improve heat exchange as recognized by Osthues et al.

Regarding claims 5 and 8-9, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a fluid distributor in the inlet space of the second refrigerant path, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *In re Harza*, 274F.2d 669, 124 USPQ 378 (CCPA 1960).

Response to Arguments

The rejections in view of Torigoe et al (JP), Nozawa, Murayama, Aikawa et, Kajikawa et al and Aikawa are withdrawn.

In the rejection of claim 1 above, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the recitation of a "two-block" heat exchanger is not given any patentable weight. There is no structure in the body of the claim to support the meaning of a "two-body" heat exchanger.

No further comments are deemed necessary at this time.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648. Status of the application may also be obtained from the Internet: http://pair.uspto.gov/cgi-bin/final/home.pl

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.

Leonard R Leo

LEONARD R. LEO
PRIMARY EXAMINER
ART UNIT 3743

June 14, 2003